

S/N 09/376,875

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Gregory M. Chrysler et al.

Examiner: Christopher Atkinson

Serial No.: 09/376,875

Group Art Unit: 3743

Filed: August 18, 1999

Docket: 884.148US1

Title: FOLDED FIN HEAT SINKS

RECEIVED

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

DEC 13 2002

TECHNOLOGY CENTER R3700

Commissioner for Patents  
Washington, D.C. 20231

Applicant has reviewed the Office Action mailed on June 4, 2002.

This response is accompanied by a Petition, as well as the appropriate fee, to obtain a three-month extension of the period for responding to the Office action, thereby moving the deadline for response from September 4, 2002 to December 4, 2002.

REMARKS

Applicant has carefully reviewed and considered the Office Action mailed on June 4, 2002, and the references cited therewith.

No claims are amended, no claim are canceled, and no claims have been added; as a result, claims 1-3, 5-9, and 22-24 are now pending in this application.

§103 Rejection of the Claims

Claims 1-2, 5-9, and 22-24 were rejected under 35 USC § 103 as being unpatentable over Jean (U.S. Patent No. 5,701,951) or Morosas (U.S. Patent No. 5,494,098) in view of Lee (U.S. Patent No. 5,375,655) and Yeh (U.S. Patent No. 5,706,169).

The reference (or references when combined) must teach or suggest all the claim elements. M.P.E.P. § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). Independent claims 1 and 22 recite "*a clip* that attaches and thermally couples the folded fin structure to the base."

In contrast, Yeh describes the use of a clip to attach the cooling apparatus to the computer chip. Yeh states "The cooling apparatus 10 is fastened with a computer chip by means of a plastic frame 12 (indicated by the imaginary lines) and a retaining device 14." (Col. 2, ln. 48-50) Yeh makes no mention of using *a clip* to attach and thermally couple the folded fin structure to the base. In fact, Yeh teaches away from the present invention by stating "Two cooling fins 30 are joined with the cooling plate 20 such that two cooling fins 30 are respectively secured to the recesses 22 and 24 of the cooling plate 20, and that apexes 304 of the ridges 302 are attached to the bottom